

July 12, 2013  
1420 East 6<sup>th</sup> Ave.  
P.O. Box 200701  
Helena, MT 59620-0701

Environmental Quality Council  
Montana Department of Environmental Quality  
Montana Department of Fish, Wildlife and Parks  
Fisheries Division  
Endangered Species Coordinator  
Missoula Office

Montana State Library, Helena  
MT Environmental Information Center  
Montana Audubon Council  
Montana Wildlife Federation  
North Powell Conservation District, 1002 Hollenback Road, Suite C, Deer Lodge, MT 59722  
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722  
Montana River Action, 304 N 18<sup>th</sup> Ave., Bozeman, MT 59715  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
U.S. Fish and Wildlife Service, 922 Bootlegger Trail, Great Falls, MT 59404  
State Historic Preservation Office, Helena  
Big Blackfoot Chapter Trout Unlimited, P.O. Box 1, Ovando, MT 59854  
Jay Stitt, 1664 Lower Braziel Creek Road, Helmville, MT 59843

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding to restore approximately 540 feet of Braziel Creek that will result in a self-maintaining stream capable of conveying sediment and flows generated in the watershed. The intent of the project is to enhance habitat in a reach of Braziel Creek for a slightly hybridized population of westslope cutthroat trout. The project site is located on property owned by Mr. Jay Stitt about 9 miles southeast of the community of Helmville in Powell County.

Please submit any comments that you have by 5:00 P.M., August 12, 2013 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer  
Habitat Section  
Fisheries Bureau  
e-mail: [mlere@mt.gov](mailto:mlere@mt.gov)

ENVIRONMENTAL ASSESSMENT  
Fisheries Division  
Montana Fish, Wildlife & Parks  
Braziel Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that directs the Montana Fish, Wildlife and Parks (FWP) to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the restoration of a 540-foot reach of Braziel Creek, a tributary to Nevada Creek. Braziel Creek supports a slightly hybridized population of westslope cutthroat trout. A reach of the stream located downstream from the county road has incised and has become disconnected from the adjacent floodplain. Due to this channel incision and deficient woody riparian vegetation, stream bank erosion rates are high and pool habitat is lacking. This project calls for restoring proper channel morphology to improve fish habitat, sediment transport and water quality by constructing a step-pool channel that transitions at the lower end into a meandering gravel bed channel. A riparian grazing exclosure, with a hardened livestock water gap, would be installed along the entire length of the restored channel. Braziel Creek is a tributary to Nevada Creek located about 9 miles southeast of the community of Helmville in Powell County.

I. Location of Project: The project site is located on Braziel Creek, a tributary to Nevada Creek, located within Township 12 North, Range 10 West, Section 10 in Powell County (Attachment 1).

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to “restore and enhance degraded fisheries habitats” by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Braziel Creek is a small 2<sup>nd</sup> order tributary to Nevada Creek that supports a slightly hybridized population of westslope cutthroat trout (98% pure). The four-mile long stream flows through Bureau of Land Management property for the first 2.1 miles and then through 1.8 miles of private ranchland before entering Nevada Creek. A stream restoration project completed in 2010 on a reach of the stream located just upstream from the county road crossing resulted in substantial increases in westslope cutthroat trout abundance (10 fish/100 feet of channel pre-project to 35 fish/100 feet post-project). Downstream of the county road crossing, the channel is incised and has become disconnected with the adjacent floodplain. This channel incision was exacerbated by high run-off flows in 2011. Additionally, recent sediment accumulation in a short reach of the stream has created a braided channel, resulting in impeded fish passage. This sediment deposition, in part, was due to historic manipulations which moved the stream to flow cross-valley. This proposed project calls for restoring 540 feet of degraded channel and for implementing a riparian re-vegetation and grazing management plan.

### III. Scope of the Project:

This project would involve reconstructing approximately 540 feet of stream channel (Attachment 2). The upper 340 feet of this stream segment would be reconstructed to a slightly meandering step-pool system by adding native alluvium to the entrenched channel and installing channel-spanning log habitat structures. The step-pool system will function to dissipate stream energy, create pool habitat for westslope cutthroat trout and maintain channel grade control. The lower 200 feet of channel, where a portion of the existing channel had aggraded into a braided system, would be transitioned into a meandering, single-thread channel. Small wood habitat structures would be incorporated into the newly constructed meander bends to provide cover and complexity for resident fish and to protect stream banks from erosion until woody riparian vegetation is established (Attachment 3). The landowner would develop a management plan to protect the restoration work from livestock grazing and agricultural land use. A riparian fence would be installed along the entire length of the restored channel to create a grazing exclosure. The total cost for this project is estimated at \$32,620. Of this total, the Future Fisheries Improvement Program would be contributing up to \$10,700. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash
USFWS		\$8,000
Landowner	\$200	\$5,700
Chutney Foundation		\$6,670
Big Blackfoot TU	\$13,500	\$3,000

### IV. Environmental Impact Checklist:

Please see attached checklist.

### V. Explanation of Impacts to the Physical Environment

#### 1. Terrestrial and aquatic life habitats.

Brazier Creek supports a slightly hybridized westslope cutthroat trout population. This population is isolated from Nevada Creek by a beaver complex located near the mouth. Monitoring of a 2010 channel restoration project, located just upstream of this proposed project (upstream of the county road), found substantial increases in westslope cutthroat trout densities following project completion. This proposed project is expected to enhance fish populations within a short segment of Brazier Creek by improving overall habitat conditions. Re-vegetation efforts within the riparian corridor, coupled with proposed changes in grazing management, are expected to improve habitat for riparian dependent wildlife.

#### 2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent

practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the stream margin in the project vicinity would be temporarily disturbed during construction. Proposed re-vegetation efforts and changes in riparian grazing management would mitigate for this disturbance.

4. Vegetation cover, quantity and quality.

Vegetation and cover within the project vicinity would be disturbed during the period of construction. Stream banks currently are vegetated with pasture grasses. Proposed re-vegetation efforts; including 50 willow clump transplants, 6500 willow springs and 600 linear feet of sod transplants; would mitigate this disturbance. Additionally, the installation of riparian fencing and the associated management as a riparian grazing enclosure would result in an improved riparian vegetative community.

5. Aesthetics.

In the short term, aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. The project is expected to take approximately two weeks. In the long term, the proposed project would enhance aesthetics in Braziel Creek by restoring an altered reach of stream and by enhancing the riparian vegetative community.

7. Unique, endangered, fragile, or limited environmental resources.

Braziel Creek supports slightly hybridized westslope cutthroat trout. Testing has revealed a genetic composition of 98.5% cutthroat trout and 1.5% rainbow trout. Westslope cutthroat trout are native to Montana and are classified as a "Species of Special Concern" because of their shrinking distribution and declining numbers. The proposed project will improve overall aquatic habitat, which is expected to benefit westslope cutthroat trout utilizing the stream.

8. Historic and archeological sites.

The proposed channel excavation has the potential to disturb cultural artifacts, if present. Additionally, the proposed project will require an Army Corp of Engineers 404 permit, where the permittee could not proceed until a "no effect" determination from the Corp or other authorization under the National Preservation Act is received. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with

the federal historic preservation regulation. Future Fisheries funding would not be made available until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

None.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding is provided through the Future Fisheries Improvement Program, the applicant would have to either seek additional sources of funding to complete the project or a reach of Braziel Creek would continue to be degraded and upstream fish passage at an aggrading reach of the channel would remain impaired. Fish populations within this short segment of Braziel Creek would remain diminished.

2. The Proposed Alternative

The proposed alternative intends to provide partial funding through the Future Fisheries Improvement Program to restore a degraded reach of Braziel Creek and to improve overall fish habitat within a 540-foot segment of stream. The project is expected to benefit a resident westslope cutthroat trout population. The installation of riparian fencing and associated changes to grazing management is expected to enhance the riparian vegetative community and improve habitat for riparian dependent wildlife.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Parks webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on August 12, 2013.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer  
Habitat Protection Bureau  
Fisheries Division  
Montana Fish, Wildlife and Parks  
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Helena, MT 59620  
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**MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS**  
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701  
(406) 444-2535

**ENVIRONMENTAL ASSESSMENT**

Project Title: Braziel Creek Channel Restoration Project

Division/Bureau: Fisheries Bureau -Future Fisheries Improvement

Description of Project: The Future Fisheries Improvement Program tentatively plans to provide partial funding to a project calling for the restoration of a 540-foot reach of Braziel Creek, a tributary to Nevada Creek. Braziel Creek supports a slightly hybridized westslope cutthroat trout population. The project calls for restoring proper channel morphology to improve fish habitat, sediment transport and water quality. The proposed project would be located on property owned by Jay Stitt about 9 miles southeast of the town of Helmville in Powell County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites					X	X

# POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities				X		
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction: North Powell Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

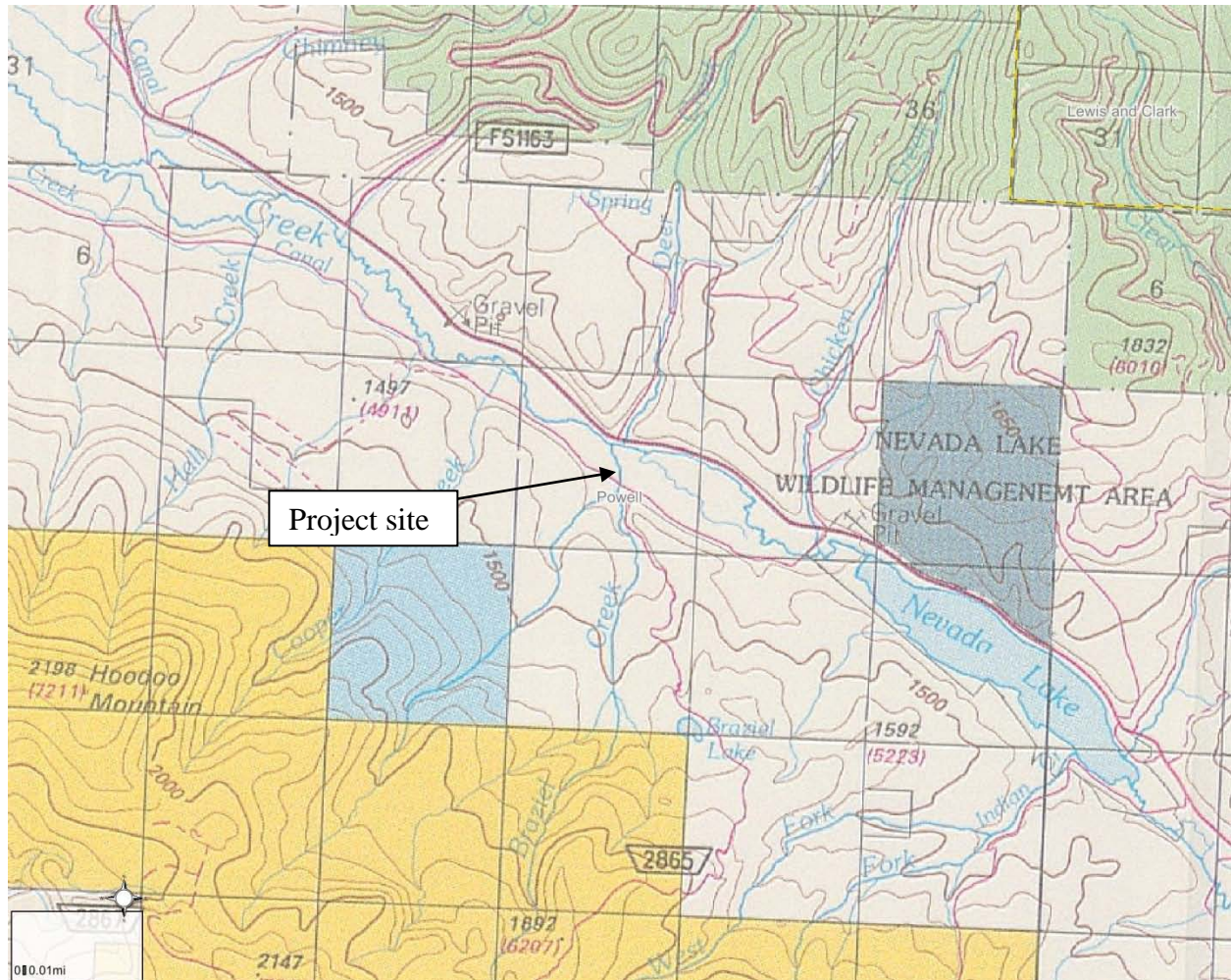


Individuals or groups contributing to this EA Ryen Neudecker, Big Blackfoot Chapter Trout Unlimited; River Design Group.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: June 26, 2013

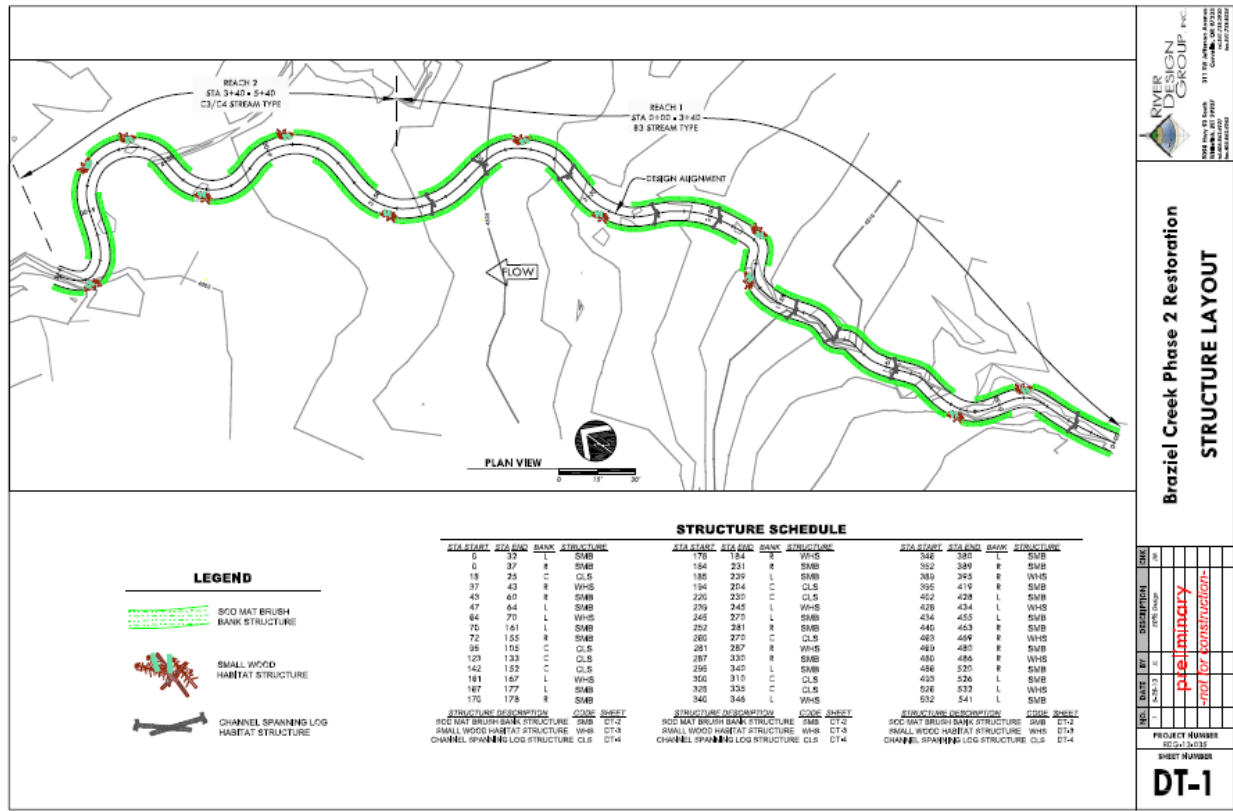


Map of Brazier Creek showing project location.

## ATTACHMENT 1

Plan view of proposed restoration on Braziel Creek

ATTACHMENT 2



Proposed restoration treatments for Brazier Creek.  
ATTACHMENT 3